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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/594,330

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Manfred Hartmann

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EXAMINER

ROY, SIKHA

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/594,330 | Applicant(s) HARTMANN, MANFRED | |
| | Examiner Sikha Roy | Art Unit 2879 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 1, 2010 has been entered.

Claims 1-14 are pending in the instant application.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested:

--- Electroluminescent Display with multiple non-coherent partial image areas---.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 2,922,076 to Sack et al. , USPN 3,890,039 to Cantarano and further in view of USPN 5,821,691 to Richie et al.

Regarding claim 1 Sack discloses (Figs. 1, 3 col. 2 lines 26-72, col. 3 lines 40-75) an electroluminescent display having an at least partially transparent carrier (support member) 20, a transparent electrode layer 22 situated on the carrier 20, a luminescent layer 24 containing electroluminophores which represents image area, a rear electrode 26 in a region of majority of the image area, an insulating layer 28 which has recess in the area of the rear electrode 26, contact layer 30 situated on at least a part of the area of the insulating layer 28 for contacting the rear electrode. It is noted that Sack discloses the contact layer(connective electrodes or conductive pillars) 30 are formed through the insulating layer and hence it is inherent that there is recess in the insulating layer through which the contact layer passes and contacts the rear electrode.

Sack discloses the contact made of electrically conductive varnish but does not expressly disclose the contact layer to be transparent.

Cantarano in pertinent art discloses (col. 4 lines 22-27) the use of high conductive transparent varnish (NESA). It has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Thus, it would have been obvious to one having ordinary skills in the art at the time the invention was made to have transparent conductive varnish as contact layer of Sack, since the selection of known materials for a known purpose is within the skill of the art.

Sack discloses the rear electrode being isolated by the insulating layer but does not expressly disclose the rear electrode layer as a whole being situated in the recess.

Richie in same filed of endeavor electroluminescent panel discloses (Fig. 5 col. 5 lines 1-30) an electroluminescent panel 50 including front electrode, and rear electrodes 73,93 as whole situated in the recess formed by the insulating layer 77,97 and are electrically isolated. Richie discloses in this configuration the insulating layer between the conductive layers and other parts of the EL panel prevents unintended connections to the conductive layer and patterned rear electrode can be easily accommodated and thus providing various sizes and shapes of plurality of EL lamps in a single panel.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to modify the rear electrodes 26 such that they are situated as a whole in the recess and electrically isolated by the insulating layer 28 of Sack and Cantarano as suggested by Richie for preventing unintended connections and forming patterned rear electrode which are easily accommodated within the recess and thus providing various sizes and shapes of plurality of EL lamps in a single panel.

Furthermore the Examiner notes that it would have been an obvious design choice since the applicant has not disclosed that 'the rear electrode layer as a whole being situated in the recess ' solves any stated problem or is for any particular purpose.

Regarding claim 2 Sack discloses the transparent electrode made of transparent conductive material. Cantarano discloses the use of conductive transparent varnish (NESA) for transparent electrode. It has been held to be within the general skill of a

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worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Thus, it would have been obvious to one having ordinary skills in the art at the time the invention was made to have transparent electrode made of transparent conductive varnish, since the selection of known materials for a known purpose is within the skill of the art.

Regarding claim 3 Sack as modified by Cantarano and Richie discloses the contact layer is made of transparent conductive varnish.

Regarding claim 4 Sack discloses the insulating layer 28 is made of transparent glass.

Regarding claim 5 Sack discloses the display having a rear insulating layer 32.

Regarding claim 6 Sack discloses (col. 3 line 71 through col. 4 line 2) the insulating layer 32 is made of barium titanate which is known to be transparent dielectric material (as evidenced by USPN 5,069,815 to Aoki et al. col. 4 lines 50-55).

Regarding claims 7 and 8 Sack discloses the carrier consists of glass.

Regarding claim 9 Sack discloses the contact layer is contacted using its own busbar 36.

Regarding claim 10 Sack discloses (col. 4 lines 30-40) the busbar is made of silver.

Regarding claims 11, 12 and 14 Sack discloses (col. 2 lines 69-71, col. 3 lines 33-46) the image area is divided into multiple non-coherent partial image areas according to different back electrodes, bus bars (an electroluminescent layer with

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elemental back electrode forming a single light producing element) where each area can be activated individually or in groups (plurality of light producing elements).

Regarding claim 13 Sack discloses the contact layer 30 contacts the rear electrode layer directly in the region of the recess.

Response to Arguments

Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sikha Roy whose telephone number is (571) 272-2463. The examiner can normally be reached on Monday-Friday 8:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (571) 272-2457. The fax phone number for the organization is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sikha Roy/
Primary Examiner, Art Unit 2879